

SW Engineering CSC 648 Summer 2021

DormMates

Milestone 3 • Version 1 • 22 July 2021

Team 01

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History Table

Version	Date	Notes
M3V2	N/A	N/A
M3V1	07/22/2021	Initial submission
M2V2	07/19/2021	Addressed the vertical prototype, functional requirements, and diagrams feedback.
M2V1	07/08/2021	Initial submission
M1V2	07/01/2021	Added database master role to the title page, addressed use cases feedback, addressed functional requirements feedback, and addressed competitive analysis feedback.
M1V1	06/22/2021	Initial submission

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Data Definitions V3

- **General User:** A user who can view and access the website limited to the website's features. A general user must **register** by creating a student or landlord account to gain more privileges.
 - **Registration:** A general user has the option to create an account.
 - A general user shall be able to view limited listings based on an institution.
 - A general user shall be able to view the informational pages regarding the service.
- **Registered User:** A user who has access to the website's core features.
 - **Account Contains:** All registered user accounts must contain the following information.
 - **Username:** A username is required to create an account.
 - **Email:** A unique email is required to create an account.
 - **Password:** A password that will be hashed for security purposes is required.
 - **Accepted Terms of Use:** Must accept to create an account.
 - **Name:** A registered user must have a first and last name.
 - **Gender:** A registered user must specify a gender.
 - **Age:** A registered user must have an age.
 - **Photo:** A profile shall have a picture of the registered user.
 - Has the ability to log into the service.
 - **Email:** Needs to login with a unique email.
 - **Username:** Needs to login with a unique username.
 - **Password:** Needs to provide a password.
 - Has the ability to communicate with other users.
 - Has the ability to create a student account.
 - Has the ability to create a landlord account
 - **Student:** A user who signed up with a .edu email is denoted a student.
 - Has the ability to create a group.
 - Has the ability to invite other student users to a group.
 - Has the ability to invite landlords to groups.
 - **Profile:** A profile will display information / attributes of a student user.
 - **Institution :** An institution will be part of a profile
 - **Major:** A major will be part of a student profile
 - **Schedule:** Needs to specify if they have a night or day schedule
 - **Hobby:** A hobby will be part of a student profile.
 - **Personalities:** A personality will be part of a student profile.
 - **Social Media:** A link to social media outlets.

- **Landlord:** A user who signed up with a non .edu email is denoted as a landlord.
 - Has the ability to post new listings.
 - Has the ability to create leases.
 - Has the ability to add students to a lease.
 - **Profile:** A profile will display information / attributes of a landlord.
 - **Listings:** The listings that they have posted
 - **Rating:** A list of ratings given by students.
 - **Student Ratings:** Number of students that have rated the landlord.
- **Admin User:** User that has the ability to moderate the service.
 - Can validate listings and make them public on the platform.
 - Can remove listings from the platform.
 - Can answer reports made by other users on the platform.
 - **Account Contains:** All registered user accounts must contain the following information.
 - **Username:** A username is required for all admin users.
 - **Email:** A unique email is required for all admin users.
 - **Password:** A password that will be hashed is required for all admin users.
- **Listing:** A representation of a housing unit that was posted by a landlord.
 - **Location:** Represents the physical location of a listing.
 - Represented by latitude and longitude coordinates.
 - **Photos:** Represents visual representations of a listing.
 - **Lease:** Represents an agreement between one or more students and a landlord which signifies that a lease between the parties exists.
 - Landlords can create leases for their listings.
 - Students can sign leases.
 - **Amenities:** Represents the key features of a listing that are included.
 - Washer and Dryer
 - Wifi
 - Closets
 - Bathrooms
 - Furnished
 - Whiteboard
 - Living room
 - Kitchen
 - Patio
 - Parking
- **Favorite:** Specific listings that a user is interested in and wants to bookmark.

- **Match:** A representation of two student users who may be compatible roommates.
- **Groups:** A representation of a group of students that are matched and looking for listings together.
 - **Chat:** A way groups can communicate with each other on our platform.
 - Student users can share listing links in chat.
 - Student users can add a landlord user to a chat.
 - Landlord users can create a lease in a chat and invite all student users to sign the lease.

Functional Requirements V3

1. Priority 1 - Required

1.1. Unregistered User

- 1.1.1. An unregistered user can create a new student or landlord account.
- 1.1.2. An unregistered user can view listings near an institution of their choice.
- 1.1.3. An unregistered user can view the Home page.
- 1.1.4. An unregistered user can view the Terms of Service page.
- 1.1.5. An unregistered user can view the FAQ page.
- 1.1.6. An unregistered user can view the Features pages.
- 1.1.7. An unregistered user can view the About page.

1.2. Registered User

- 1.2.1. A registered user should be able to login to with their username and password.
- 1.2.2. A registered user should be able to logout of their account.
- 1.2.3. A registered user should be able to submit a forgotten password form.
- 1.2.4. A registered user should be able to submit a forgotten email form.
- 1.2.5. A registered user should be able to change their username.
- 1.2.6. A registered user should be able to change their email address.
- 1.2.7. A registered user should be able to change their password.

1.3. Students

- 1.3.1. A student user must have a verified edu email.
- 1.3.2. A student user must have a completed profile.
- 1.3.3. A student user shall be able to view the student dashboard.
- 1.3.4. A student user shall be able to view student user profiles.
- 1.3.5. A student user shall be able to message another user.
- 1.3.6. A student user should be able to add other student users to a group.
- 1.3.7. A student user should be able to add a landlord to a group.
- 1.3.8. A student user shall be able to search for listings.
- 1.3.9. A student user shall be able to edit their personality.
- 1.3.10. A student user should be able to edit their schedule.
- 1.3.11. A student user should be able to edit their hobbies.
- 1.3.12. A student user shall be able to filter listings by price.
- 1.3.13. A student user shall be able to filter listings by amenities.
- 1.3.14. A student user shall be able to filter listings by distance from university.
- 1.3.15. A student user shall be able to filter roommate selections by personality.
- 1.3.16. A student user shall be able to filter roommate selections by major.
- 1.3.17. A student user shall be able to filter roommate selections by hobbies.
- 1.3.18. A student user shall be able to filter roommate selections by schedule.
- 1.3.19. A student user should be able to view the location of a listing on a map.
- 1.3.20. A student user shall be able to favorite a listing.

1.4. Landlords

- 1.4.1. A landlord user shall be able to view the landlord dashboard.
- 1.4.2. A landlord user shall be able to view their own profile.
- 1.4.3. A landlord user shall be able to post listings.
- 1.4.4. A landlord user shall be able to edit their listings.
- 1.4.5. A landlord user shall be able to view student profiles.
- 1.4.6. A landlord user will be able to respond to student user messages.
- 1.4.7. A landlord user shall be able to delete their listings.

1.5. Admin

- 1.5.1. Admin users should be able to approve or deny listings created by landlords.

2. Priority 2 - Desired

2.1. Unregistered User

2.2. Registered User

- 2.2.1. A registered user should be able to delete a chat.

2.3. Students

- 2.3.1. A student user should be able to change their university.
- 2.3.2. A student user shall be able to rate landlords.

2.4. Landlords

- 2.4.1. A landlord user shall be able view historical listing data.
- 2.4.2. A landlord user shall be able to repost their listing once expired.

2.5. Admin

- 2.5.1. Admin users should be able to edit registered user profiles.

3. Priority 3 - Opportunistic

3.1. Unregistered User

3.2. Registered User

3.3. Students

3.3.1. A student user shall be able to report a listing.

3.3.2. A student user shall be able to report another user.

3.4. Landlords

3.4.1. A landlord shall be able to report a listing.

3.4.2. A landlord shall be able to report another user.

3.5. Admin

3.5.1. Admin users should be able to disable non-admin user accounts.

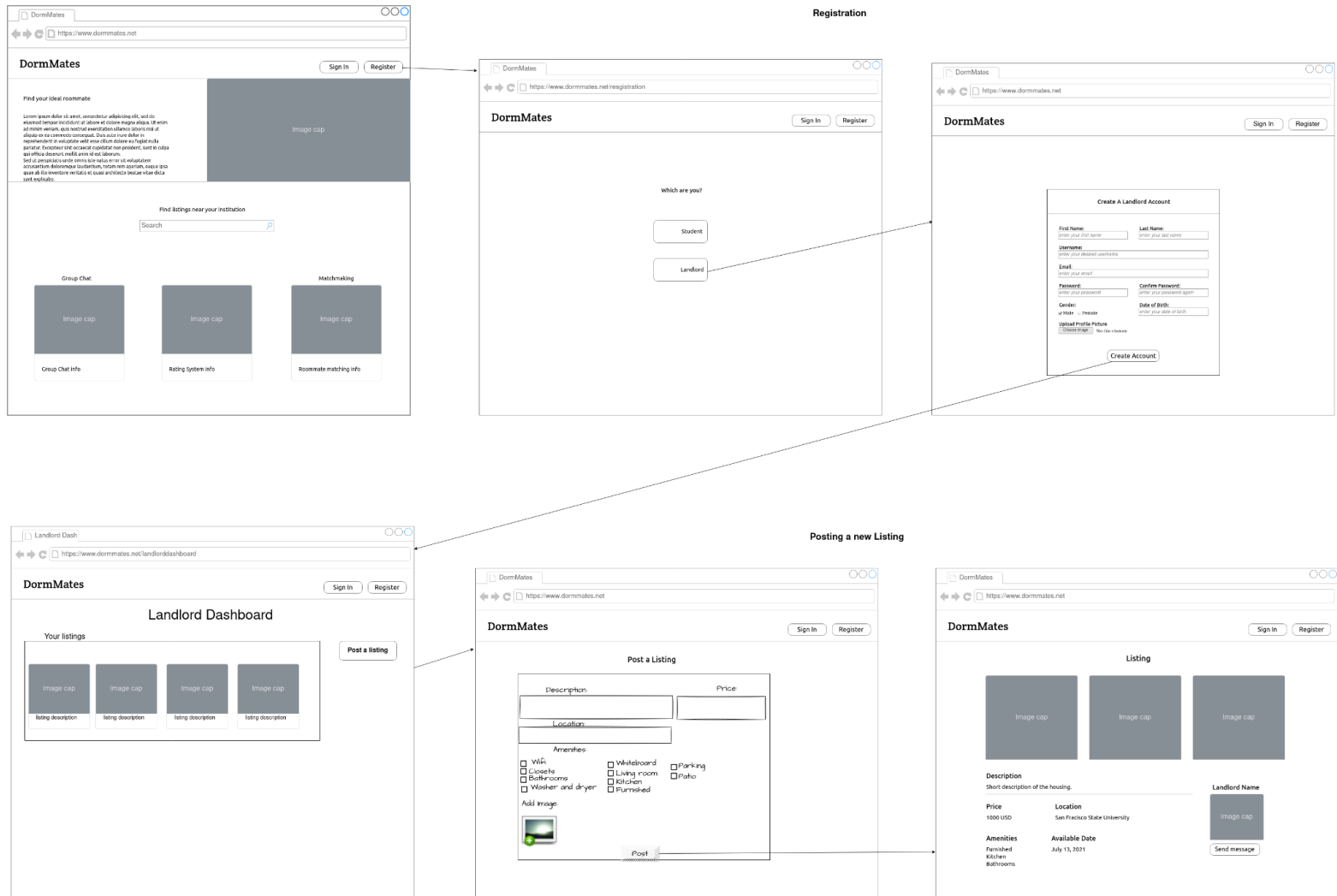
3.5.2. Admin users should be able to remove a listing.

3.5.3. Admin users should be able to view reports.

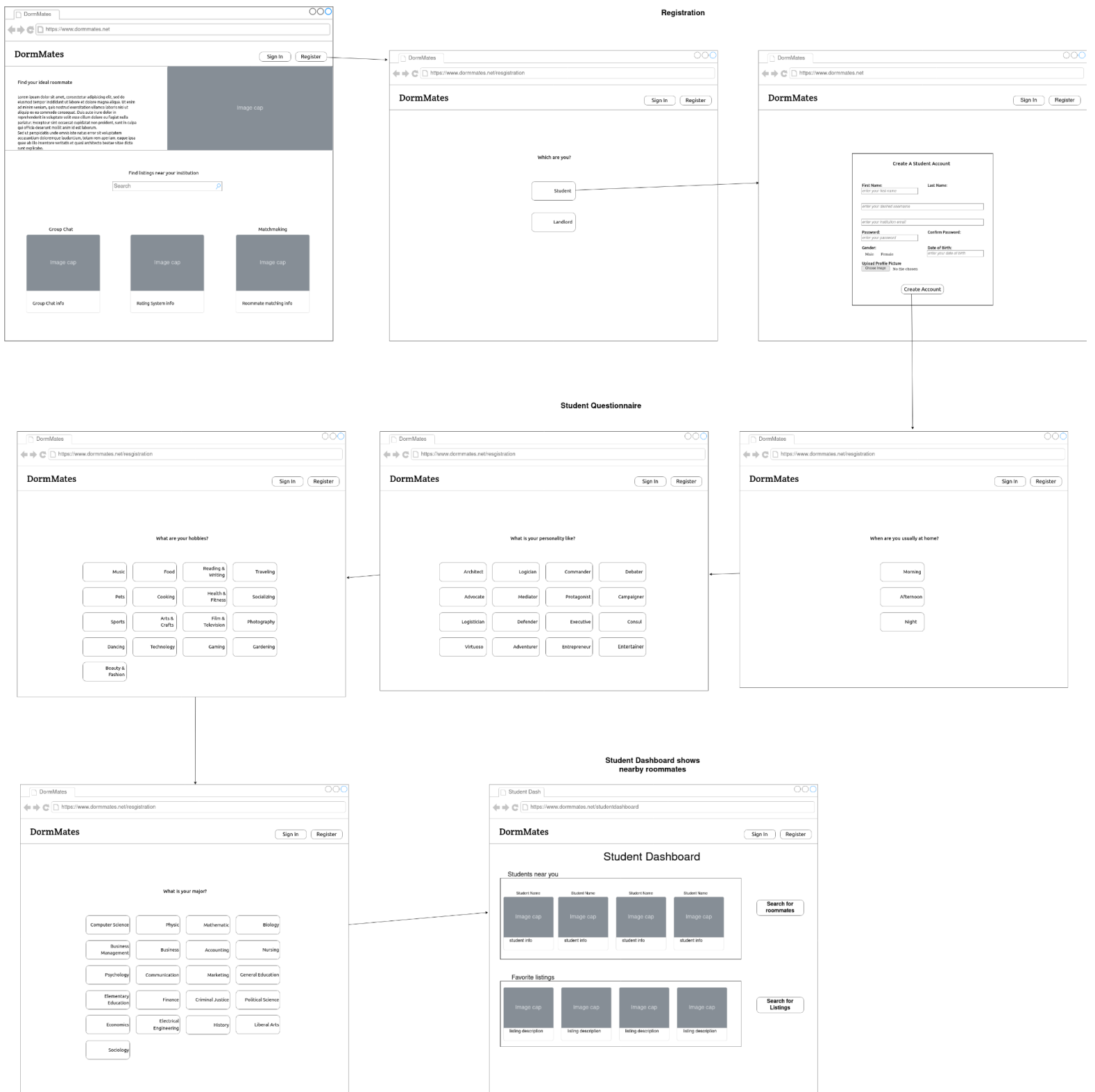
3.5.4. Admin users should be able to respond to reports.

Wireframes

Use Case 1: Creating a Landlord Account and Posting a Listing

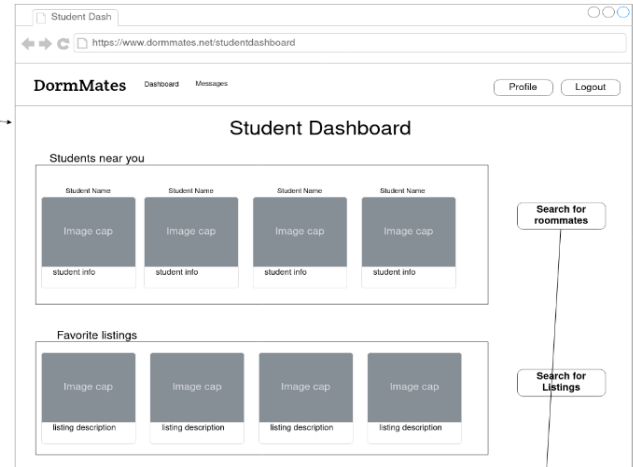
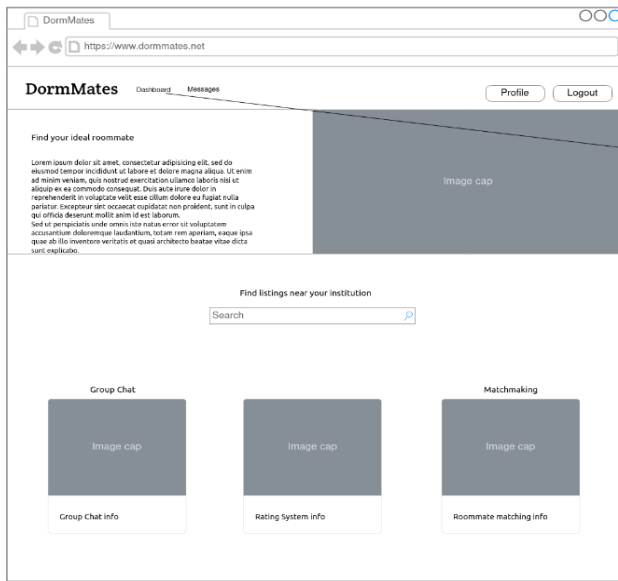


Use Case 4: Student Creates a New Account



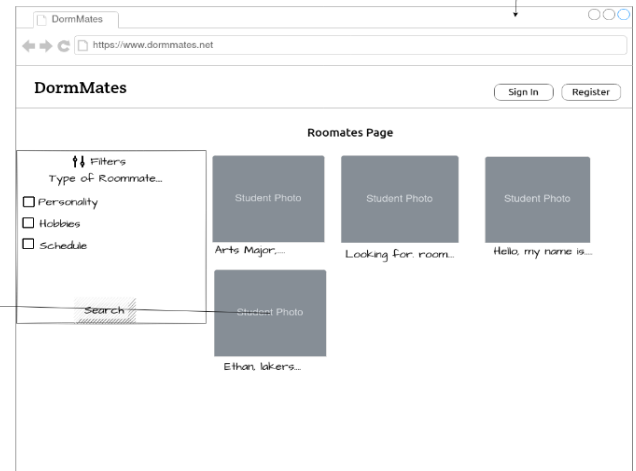
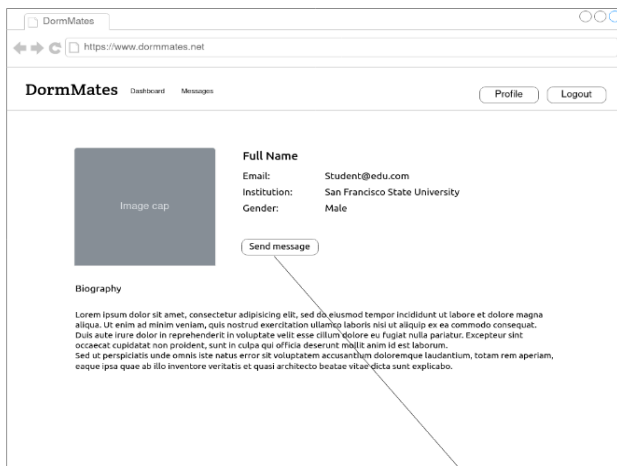
Use Case 5: Student Needs Roommates

User is logged in

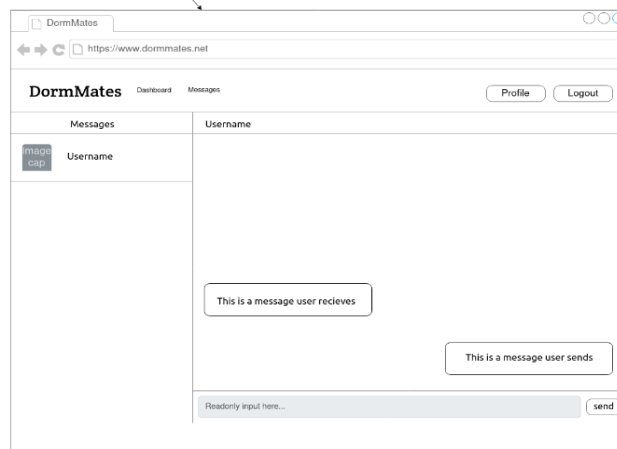


Clicking on a students card leads you to their profile.

Viewing a student's profile



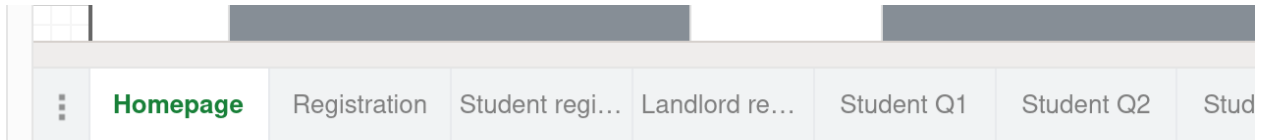
Messaging another user



All Wireframes

Each individual wireframe can be viewed [here](#).

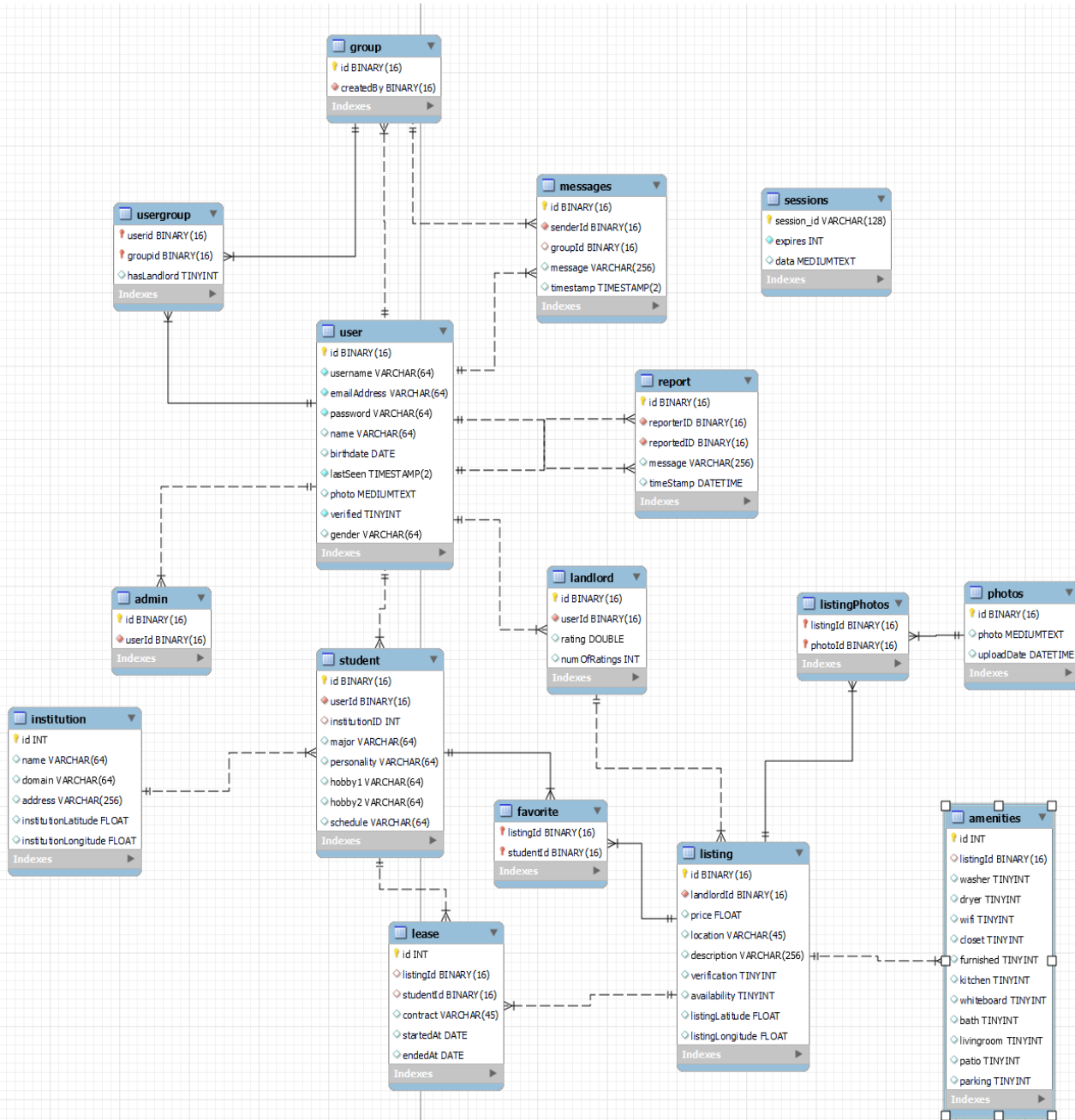
Each tab at the bottom of the web page represents one wireframe.



High Level Database Architecture and Organization V2

Database Model

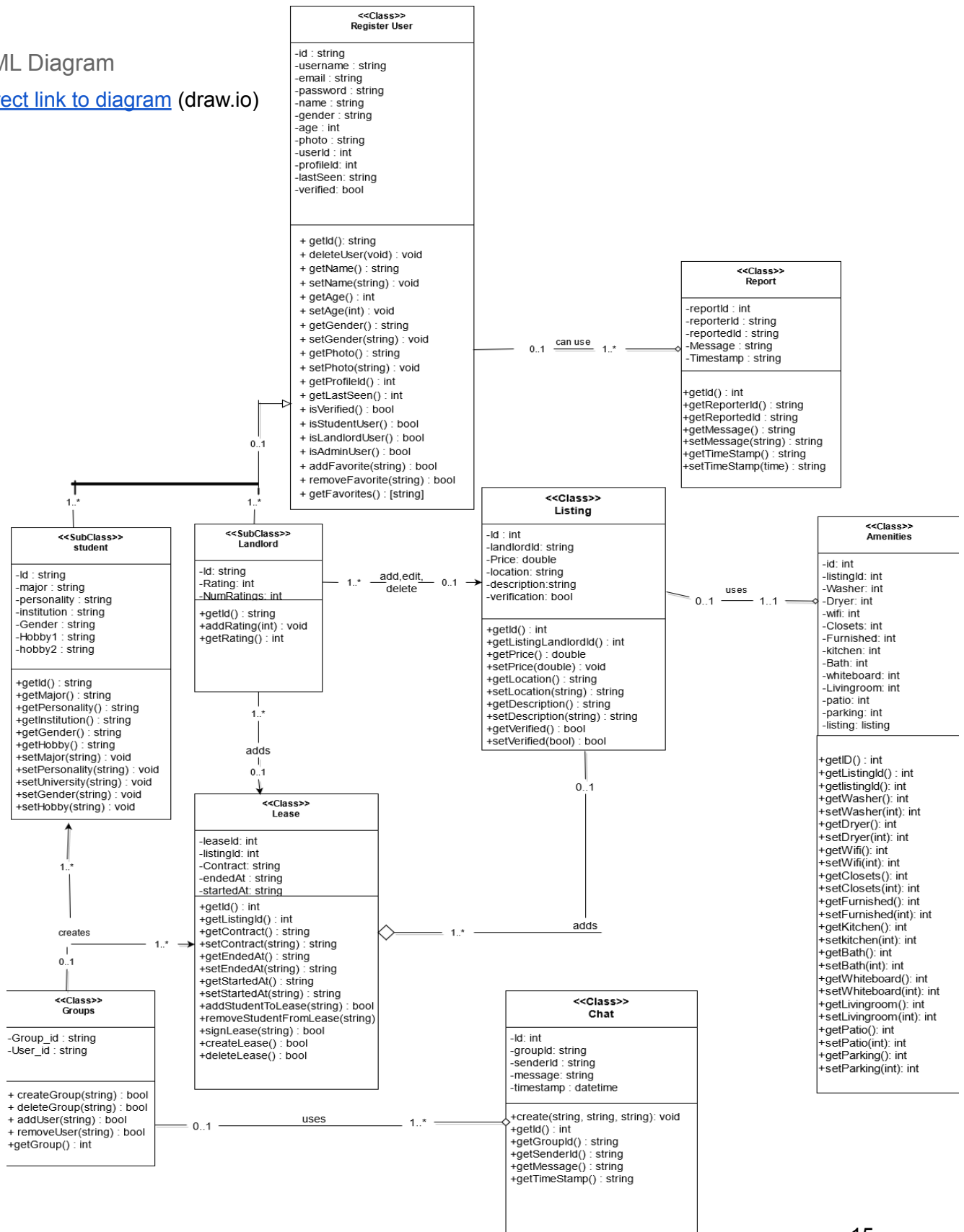
[DB SQL](#) (pastebin.com)



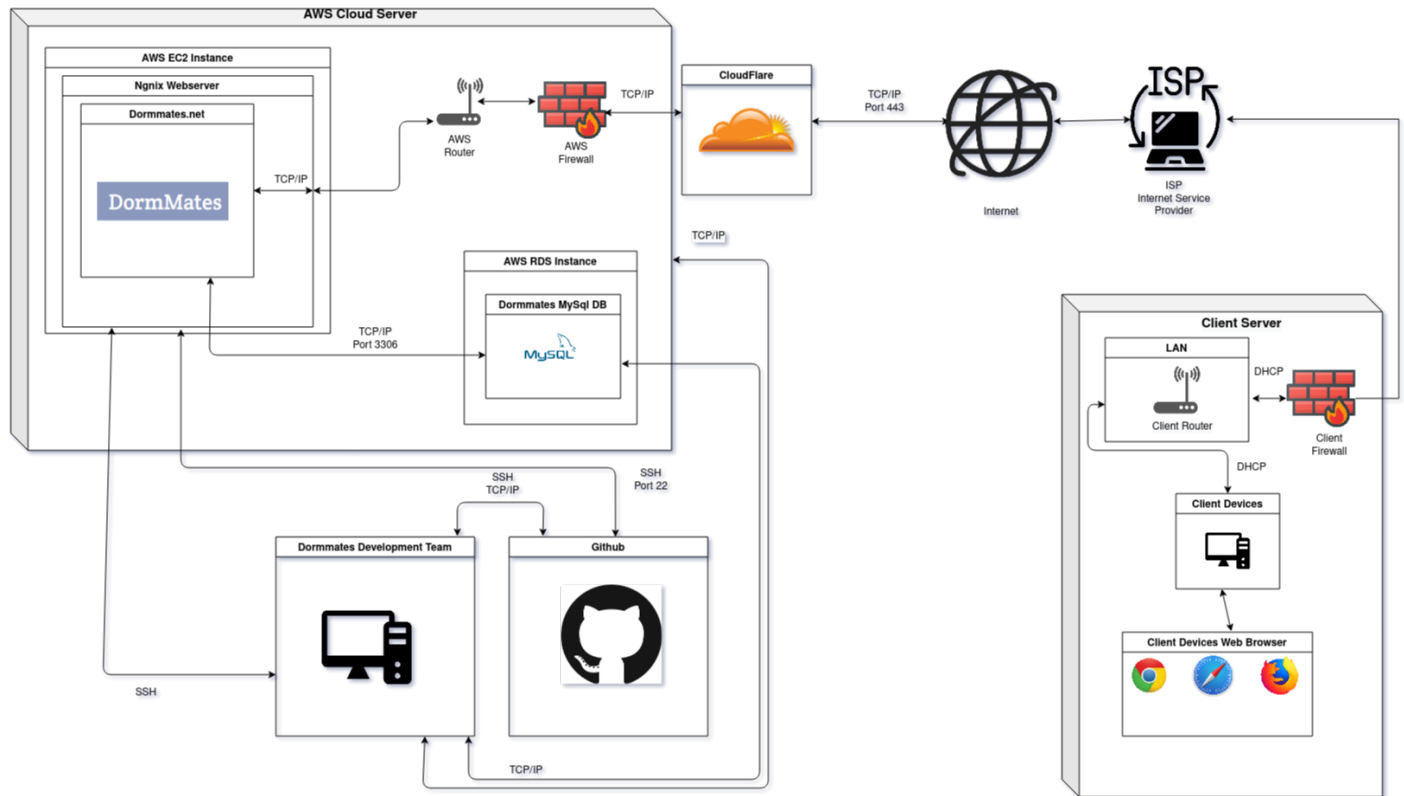
High Level Diagrams V2

UML Diagram

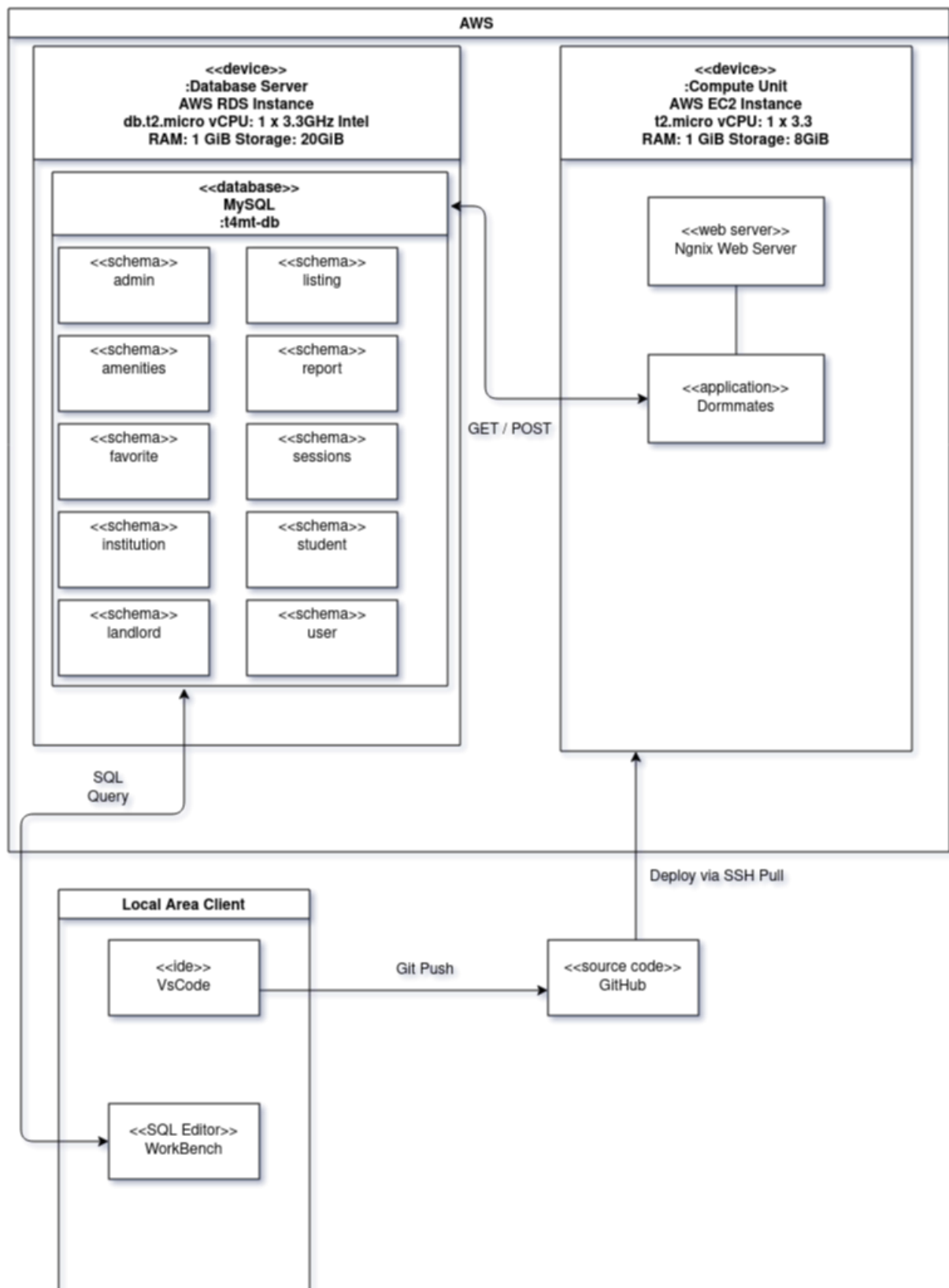
[Direct link to diagram \(draw.io\)](#)



Network Diagram



Deployment Diagram



Detailed List of Contributions

Andrei

- Hosted 1 team meeting where we discussed M2 feedback and worked on functional requirements V3.
- Created Jira tasks to address M2 feedback.
- Created Jira tasks for the frontend team to complete the horizontal prototype.
- Created Jira tasks for the backend team to work on numerous backend APIs.
- Hosted pair programming sessions with the backend team where we discussed implementation of key backend services.
- Hosted pair programming sessions with the frontend team where we discussed implementing wireframes.
- Gave feedback to the frontend and backend teams on their respective tasks.
- Performed code reviews on both the frontend and the backend.

Jonathan

- Participated in team meetings and worked on functional requirements V3.
- Worked on addressing business rules feedback.
- Hosted many pair programming sessions throughout the week with the backend team in order to implement key areas of the backend.
- Created backend documentation for the listing and leases API.
- Implemented the listing API and the lease API.
- Tested the listing API, lease API, search API.
- Assisted in testing and creation of search and favorites API.
- Updated and implemented Database models

Meeka

- Participated in team meetings and worked on functional requirements V3.
- Hosted pair programming sessions with the frontend team.
- Worked on addressing the vertical prototype feedback.
- Created wireframes for the profile, listing, and chat pages.
- Converted profile, listing, and chat wireframes into pug views.
- Created CSS used by the frontend team.
- Implemented scripts to make the frontend dynamic.
- Created dummy data that is used by the profile, listing, and chat pug views.

Jimmy

- Participated in team meetings and worked on functional requirements V3.
- Hosted pair programming sessions with the frontend team.
- Worked on addressing the UML diagram feedback.
- Created wireframes for the student and landlord dashboard pages.
- Converted student and landlord dashboard wireframes into pug views.
- Created dummy data that is used by the student and landlord dashboard pug views.

Alexandre

- Participated in team meetings and worked on functional requirements V3.
- Worked on addressing the Network and Deployment diagrams feedback.
- Hosted many pair programming sessions throughout the week with the backend team in order to implement key areas of the backend.
- Created backend documentation for the search and favorites API.
- Implemented the search and favorites API.
- Tested the search and favorites API.
- Assisted in creation of lease API and listing API.
- Assisted in testing lease API and listing API.

Sayed

- Participated in team meetings and worked on functional requirements V3.
- Worked on addressing the entities and ERD feedback.
- Created wireframes for the roommates, listings, and create-a-listing pages.
- Converted roommates, listings, and create-a-listing pages into pug views.
- Created dummy data for the roommates and listings pug views.

Ahad

- Participated in team meetings and worked on functional requirements V3.
- Created backend documentation for the chat and groups API.